IOWA HIGHWAY RESEARCH BOARD

Minutes of October 25, 2002

Regular Board Members Present

J. Adam
J. Byg
R. Krauel
J. George
M. Nahra
R. Gould
J. Selmer
L. Greimann
C. Van Buskirk
D. Julius
W. Weiss

Alternate Board Members Present

T. Fonkert for J. Weber
L. Jesse for K. Mahoney
J. Ites
J. Odgaard for R. Ettema
C. Marker
G. Miller
R. Schletzbaum
R. Younie

Board Members With No Representation

None

Secretary

M. Dunn

Visitors

Wally Mook City of Bettendorf

Jenny Balis FHWA

Saleem Baig Iowa Department of Transportation Iowa Department of Transportation Sara Buseman Ed Engle Iowa Department of Transportation Jim Grove Iowa Department of Transportation Sandra Larson Iowa Department of Transportation Mohammad Mujeeb Iowa Department of Transportation Ananto Prasetyo Iowa Department of Transportation Wallace Rippie Iowa Department of Transportation **Bob Steffes** Iowa Department of Transportation

Jim CableIowa State UniversityBrian CoreeIowa State UniversityEd JaselskisIowa State UniversityDavid WhiteIowa State University

Steve Andrle Iowa State University/CTRE

Duane Smith Iowa State University/CTRE

Bob Sperry Story County

Kirk Henderson UNI Roadside Office Wade Williams UNI Roadside Office The meeting was held in the Large Materials Conference Room at the Iowa Department of Transportation, Ames, Iowa. The meeting was called to order at 9:00 A.M. by Wade Weiss.

Agenda review/modification

• No additions or modifications.

Approval of the minutes

• Roger Gould moved to approve the minutes from the September 27, 2002 meeting with no additions or corrections. Mark Nahra seconded. Carried with 15 yes, 0 no, and 0 abstaining.

Final Report, TR-449, "Determination and Evaluation of Alternative Methods for Managing and Controlling Highway-Related Dust"

- Dr. Brian Coree, Iowa State University, presented the objectives; scope; road dust measurement information, for both laboratory and field studies; road dust characteristics and mechanisms of dust production; classification of dust palliatives; mechanisms of palliation; dust suppression selection; summary specific to Iowa; and recommendation for further evaluation.
- It was noted that the report reviewed using chemicals to suppress dust. The report did not, however, reference any use of used vegetable oil. It was thought that some testing has been done regarding this at UNI.
- Mark Nahra moved to approve the final report. John Adam seconded. Carried with 15 yes, 0 no, and 0 abstaining.

Final Report, TR-462, "Tree and Brush Control for County Road Right-of-Way"

- Kirk Henderson, University of Northern Iowa Roadside Office, reviewed the efforts that went into the research manual and thanked the Board and others for support. There was an extensive literature search and look at the Iowa Code. The majority of material was based on a survey given to Iowa counties, which provided an interesting array of information. Wade Williams, Co-Principal Investigator, added that there is a desire to have a version of the manual condensed and made available into a glove box size.
- Doug Julius moved to approve the final report. Randy Krauel seconded. Carried with 15 yes, 0 no, and 0 abstaining.

Proposal for continuation of HR-296, "Local Technical Assistance Program (LTAP)"

- Wally Mook, City of Bettendorf, and Duane Smith, Iowa State University/CTRE, gave an overview of the board members, services available, sponsors, LTAP's link to research, 2003 training opportunities for individuals, and funding breakdowns for LTAP for 2003.
- The benefit of having LTAP making available reports like TR-462 (reviewed prior to this topic), was mentioned.

- With the LTAP board not wanting to delete any activities, the 2003 proposal included an increase for the IHRB funding until other funding can increase. There has been a request put in for increased funds from FHWA.
- Wally Mook stated that he will be stepping down from the LTAP Board and will be replaced by Bob Sperry of Story County.
- Randy Krauel moved to approve the final report. Christy Van Buskirk seconded. Carried with 15 yes, 0 no, and 0 abstaining.

Proposal, "Stringless Portland Cement Concrete Paving"

- Jim Cable, Iowa State University, passed out a question and response sheet and a revised budget due to staff questions on the initial proposal. He then presented the basics of the paving projects, information on the options for equipment, and the idea of a pre-bid conference and open house once the project is started.
- There was clarification that no satellites will be used during paving. This research uses robotic total station technology.
- There was a concern mentioned that with this project, there is a perception of a sole equipment supplier. Jim said that that is allowed at a research level.
- There was a concern if there would be a full paving train available during the time frame that it would be needed for this project. This will try to be timed well, but is still in limbo.
- With there being such a benefit to Gomaco, in getting them out as a leader with this technology, it was asked if they would be willing to help with the funding of the project in some fashion. Jim reported that he had talked with them about setting the equipment on the jobsite. They didn't appear too eager.
- It was mentioned that the \$10,000 from the PCC Center was invested in this project from ear marked funds, and the interest of this being the wave of the future.
- Brian Keierleber moved to approve the proposal with a funding split of 45% Primary, 50% Secondary, and 5% Street. Mark Nahra seconded. Carried with 14 yes, 0 no, and 1 abstaining.

Develop/Finalize RFPs for 2nd Solicitation for FY 02-03

- Mark Dunn handed out the 2002 Ranked Ideas for Project Solicitation list and reviewed the standing of the first 7 topics on the list which were worked through in the 1st round of solicitations.
- There was discussion on topic 8, "The development of a simple bridge rating computer program for oversized and unusual loads to be used by local jurisdictions." It was decided that Mark Nahra will coordinate a search into software that is already available and report the findings back to the Board.

- It was decided that Mark Dunn will start the consultant selection process in approaching the 9th topic, "Update county single span bridge standards to replace the wood abutments with sheet pile, H-pile, or pre-cast PCC as backing plank."
- Mark Dunn handed out a copy of the RFP for topic 10, "Development of a winter performance index." It was felt that this will be a good topic to help see how effectively things are being done currently and where improvements may be needed, especially at the state level.
 - It was requested that the time frame be increased to allow for development time and more time for testing the performance.
 - This will be sent out with the goal of having proposals reviewed at the January meeting.
- Topic 11, "Drainage law issues" was discussed. Mark Dunn had a sample of a guide that Illinois had available on the internet, which is geared more towards citizens. The Iowa Drainage District Association also has a publication, but that has more of a focus on the laws and administrative rules. The Board discussed the need and benefit of having a guide that had a public audience.
 - Mark Dunn will adjust perspective and objective of the RFP so that it is based on a public audience. It will be brought back to the December 12 meeting for review.
 - Mark Dunn will collect names of people or organizations who have been involved in writing information on drainage law issues and that will be the group from which proposals will be solicited.
- Topic 12, "Conversion of the highway needs study program (HWYNEEDS) to PC based windows environment" was reviewed. Currently there is a committee that is reviewing this issue, with a target date of August 2003 for making recommendation on what direction to take. It was decided that this topic may be a good candidate for an "immediate need" type of research project after that recommendation is made, instead of going through the Board's prioritization process.

Clarification on the solicited proposal, "Slope Stability Evaluation and Remediation Techniques for Iowa"

- The RFP on this topic resulted in one proposal being received from Dr. David White, Iowa State University. The proposal was tabled at the last meeting allowing staff to clarify the issue of priority effort with the Principal Investigator. A letter of clarification was included in the Board packet.
- After discussion, it was felt that many of the existing techniques are already in text books and widely used. There was discussion on the new zip pile technique being developed and tested within this project. It was felt that a title change for the project to include 'innovative techniques' would better state the intent and potential benefits of the research.
- Mark Nahra moved to approve the proposal with a funding split of 25% Primary and 75% Secondary. Todd Fonkert seconded. Carried with 15 yes, 0 no, and 0 abstaining.
- **NOTE:** The new title assigned to this project is "Innovative Solutions for Slope Stability Reinforcement and Characterization in Iowa Soils"

Presentation on Innovative Longitudinal Joint Forming in PCC

- Bob Steffes of the Office of Materials Research, Iowa DOT, presented information on "Innovative Longitudinal Joint Forming in PCC." He thanked several people and organizations for assisting in the development and testing of this innovative technology, "the Bob-sled". He reviewed the initial idea and goal, the different versions of the joint former, the results from laboratory and field trials, the stats on the number of feet that have been formed over the last 2 years (up from 3,000 last year to 150,000 this year), and the time and monetary benefits of no sawing and no sealing.
- Jim Cable added that coming off the header needs to be handled a little differently with the joint former on the paver, but that the results have been positive.

New Business

• None

Wade Weiss adjourned the meeting.

Date of Next Meeting: THE NEXT MEETING WILL BE HELD <u>THURSDAY</u>, DECEMBER 12, 2002 AT <u>1:00 P.M.</u> IN THE LARGE MATERIALS CONFERENCE ROOM AT THE IOWA DOT, CENTRAL COMPLEX, IN AMES, IOWA.

Mark Dunn, IHRB Secretary